

In the Claims:

Please amend claim 10 and cancel claims 1-9 and 14, without prejudice, as follows:

1-9. (Cancelled)

10. (Currently Amended) A magnetic disk apparatus including a magnetic disk having servo patterns on which position signals for controlling a position of a magnetic head on the magnetic disk are written, the magnetic head having a head sensitivity characteristic value, comprising:

a correction calculation unit that calculates a correction value to correct the position signals read from the servo patterns, using the head sensitivity characteristic value; and

a servo control unit that carries out a servo control of the magnetic head based on the correction value,

wherein the magnetic disk has a plurality of first servo sectors and a plurality of second servo sectors arranged alternately, wherein the servo patterns are stored on the first servo sectors and the second servo sectors, wherein when a servo interruption period corresponding to adjacent first servo sectors is a first servo interruption period, a servo interruption period corresponding to an adjacent first servo sector and a second servo sector is a second servo interruption period, and wherein the

second servo interruption period is equal to or less than half of the first servo interruption period, and the correction unit corrects the position signals using a ratio of an open loop gain obtained by adding a predetermined amplitude disturbance to a zero-cross frequency, and an open loop gain obtained by adding a large amplitude disturbance to the head sensitivity characteristic value.

11. (Original) The magnetic disk apparatus according to claim 10, wherein the head sensitivity characteristic value is set so as to change proportionally.

12. (Original) The magnetic disk apparatus according to claim 10, wherein the head sensitivity characteristic value is set so as to change multi-value.

13. (Original) The magnetic disk apparatus according to claim 10, wherein the correction unit corrects the position signals using an amplitude ratio of predetermined signals included in the position signals, and the head sensitivity characteristic value.

14. (Cancelled)

15. (Original) The magnetic disk apparatus according to claim 10, wherein the correction unit corrects the position signals, for each cylinder of the magnetic disk, using a different head sensitivity characteristic value set to each cylinder.